65. The method of claim 62 wherein the injection is carried out until predetermined beginning-of-fill and end-of-fill pressures are reached.

66. The method of claim 62 wherein the pressure at the end-of-fill point inside the mold cavity is measured by a pressure transducer associated with said end-of-fill point.

67. The method of claim 62 wherein said plurality of said hard disc drive components comprise at least one hundred components, said at least one hundred components having a median first order frequency and wherein each of said at least one hundred hard disc drive components with a phase change material thereon has a first order frequency that is within about three hundred Hertz of said median first order frequency.

68. The method of claim 67 wherein each of said at least one hundred hard disc drive components with a phase change material thereon has a first order frequency that is within about one hundred Hertz of said median first order frequency.

69. The method of claim 67 wherein each of said at least one hundred hard disc drive components with a phase change material thereon has a first order frequency that is within about thirty Hertz of said median first order frequency.

70. The method of claim 62 wherein the resonance spectra of said plurality of hard disc drive components with phase change material thereon have a standard deviation of first order resonance frequency that is at least about twenty five percent less than the standard deviation of first order resonance frequency for the same number of the same components over-molded with an injection molding

process wherein only the injection pressure and either the injection time or stroke of an extrusion screw are controlled.

71. The method of claim 62 wherein the resonance spectra of said plurality of hard disc drive components with phase change material thereon have a standard deviation of first order resonance frequency that is at least about fifty percent less than the standard deviation of first order resonance frequency for the same number of the same components over-molded with an injection molding process wherein only the injection pressure and either the injection time or stroke of an extrusion screw are controlled.

72. The method of claim 62 wherein the phase change material has a coefficient of linear thermal expansion of less than $2x10^{-5}$ in/in/°F throughout the range of 0°F to 250°F.

73. The method of claim 1 wherein the phase change material has a coefficient of linear thermal expansion in the X, Y and Z directions, wherein the coefficient of linear thermal expansion is lowest in the X direction, and wherein the coefficient of linear thermal expansion in the Y and Z directions is no more than four times the coefficient of linear thermal expansion in the X direction.

74. A method of injection molding hard disc drive components having a reproducible resonance spectrum comprising:

a) providing at least one hundred identical hard disc drive components; and

b) over-molding a monolithic body of phase change material on a surface of said hard disc drive components using an injection molding process,

process, wherein said components with a phase change material thereon have a median first order frequency and wherein each of said at least one hundred hard disc drive components with a phase change material thereon has a first order frequency that is within about one hundred Hertz of said median first order frequency.

75. A method of injection molding hard disc drive components having a reproducible resonance spectrum comprising:

a) providing at least one hundred identical hard disc drive components, wherein each of said components has a resonance spectrum; and

b) over-molding a monolithic body of phase change material on a surface of said hard disc drive components using an injection molding process, wherein the resonance spectra of said at least one hundred hard disc drive components with phase change material thereon have a standard deviation of first order resonance frequency that is at least about fifty percent less than the standard deviation of first order resonance frequency for the same number of the same components over-molded with an injection molding process wherein only injection pressure and either injection time or stroke of an extrusion screw are controlled.